

REMARKS

Claims 5-9, 14-18, and 23-27 are pending in this application. By this Amendment, claims 5-8, 14-17 and 23-26 are amended and claims 1, 3, 4, 10, 12, 13, 19, 21, and 22 are canceled without prejudice to or disclaimer of the subject matter recited therein. No new matter is added. Support for the amendments can be found, for example, in FIGS. 4, 6, 9, 10, 12, and 14 and associated disclosure.

Applicant appreciates the courtesies shown to Applicant's representative by Examiners Leiva and Thai in the February 5 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

I. The Pending Claims Define Patentable Subject Matter

The Office Action rejects claims 1, 3-10, 12-19 and 21-27 under 35 U.S.C. §102(b) over U.S. Patent No. 6,500,069 to Ohba et al. This rejection is respectfully traversed.

A. Independent Claims 1, 10 and 19

Independent claims 1, 10 and 19 and claims 3, 4, 12, 13, 21 and 22 dependent therefrom are canceled. Accordingly, the rejection of these claims is moot.

B. Independent Claims 5, 14, and 23

Regarding independent claims 5, 14, and 23, these claims are directed to performing a given image effect processing on an image in the intermediate buffer. For example, see Applicant's Fig. 6 where image processing is performed on an isolated object, rather than on an entire frame buffer (e.g., the flame object OB which is a portion of the airplane).

These claims clarify that an intermediate drawing section draws an image of some of a plurality of geometry-processed objects in an intermediate buffer and a frame buffer drawing section draws the image of the geometry-processed objects in the intermediate buffer and draws an image of remaining ones of the plurality of geometry-processed objects in the frame buffer.

Thus, a predetermined image effect processing does not have to be performed on all of the objects, but is performed on the image of some of the objects such as shown in FIG. 6, with the images on which the image effect processing is being performed being drawn in the intermediate buffer first and then later drawn into the frame buffer. This can reduce processing load.

The Office Action relies on FIG. 2 and col. 9, lines 40-64 of Ohba referring to frame buffers 122 and 123 provided along with VRAM 121 and 131. During the interview, Examiner Leiva asserted that by provision of two frame buffers, images were being "processed" between frame buffers 122 and 123. However, as clarified by the claims, the image effect processing is performed only on some of the objects, which are then stored in the intermediate frame buffer. Ohba fails to teach or suggest this feature.

Accordingly, independent claims 5, 14, and 23 and claims dependent therefrom distinguish over Ohba.

C. Independent Claims 6, 15, and 24

As discussed during the personal interview, independent claims 6, 15, and 24 are directed to a "time-based synthesis" in which there is a blending between an image of an object in a frame buffer at a present frame with another representation of the same image at a prior frame. Independent claims 6, 15, and 24 are now revised to clarify this feature.

During the interview, Examiner Leiva relied upon Fig. 2 and col. 9, lines 40-64 and argued that there may be a synthesis of character objects with background image data, in which VRAM 121, 131 and buffers 122, 123 could be considered intermediate buffers. However, these are entirely different objects and not an earlier representation of the same object captured at an earlier point of time as now clarified.

Accordingly, independent claims 6, 15, and 24 and claims dependent therefrom distinguish over Ohba.

D. Independent Claims 7, 16, and 25

As discussed during the interview, independent claims 7, 16, and 25 are amended to clarify that another image is an image "drawn in the frame buffer at a previous frame." This is shown, for example, in Applicant's FIGS. 9 and 10 and page 27, line 18 to page 28, line 12 where a portion of the jet flames from a previous frame is redrawn into the intermediate buffer and synthesized with a current image of the flames in the intermediate buffer. In light of comments made by Examiner Leiva during the interview, these claims are further revised to clarify that "at least one" image is synthesized. Thus, an infinite shadow effect as alleged is not necessarily present.

Ohba synthesizes background image data and texture-mapped polygon data in memory 132, but does not synthesize an image in the intermediate buffer with an image drawn in the frame buffer at a previous frame.

Accordingly, independent claims 7, 16, and 25 and claims dependent therefrom distinguish over Ohba.

E. Independent Claims 8, 17, and 26

Independent claims 8, 17, and 26 are revised for clarity to specify that the intermediate buffer drawing section draws images "at a rate slower than a frame rate at which an image is drawn in the frame buffer." This is supported, for example, by Applicant's page 28 and FIG. 14 where it is decided whether an object is to be geometry processed. If not being processed, the intermediate frame buffer is not used. Thus, images are drawn in the intermediate buffer at a slower rate than the frame buffer.

There is no teaching of this feature in Ohba. Instead, it would appear that all images process from the VRAM 121, 131, through the frame buffers 122, 123, and to the memory 132.

Accordingly, independent claims 8, 17 and 26 and claims dependent therefrom distinguish over Ohba.

Applicant thus respectfully submits that the pending claims obviate the rejection. Withdrawal of the rejection is respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Petition for Extension of Time

Date: March 6, 2008

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